



Mercedes Sprinter 4x4



Properly installing suspension components is essential to ensure the safety and performance of your vehicle. This comprehensive installation guide provides step-by-step instructions for both front and rear suspension components. To guarantee a successful installation, please carefully follow these instructions and gather the necessary tools and equipment beforehand.

Required Tools and Equipment:

- Vehicle Jack or Lift*
- Vehicle Jack Stands*
- Standard Socket/Wrench Set
- Metric Socket/Wrench Set
- T45 Torque Bit

Estimated Time Required:

- Front Suspension: Approximately 30mins - 2 hours
- Rear Suspension: Approximately 15 mins - 1 hours

* Ensure Lift/Jack/Stands are rated for vehicle weight

Warnings and Advice

Prioritize Safety:

- Always prioritize safety by wearing appropriate personal protective equipment (PPE), including gloves and safety glasses.
- Perform all work on a stable and level surface and ensure the vehicle is securely supported on jack stands before any work beneath it.
- Never work under a vehicle supported solely by a jack.

Use Proper Tools and Equipment:

- Ensure you have all the necessary tools and equipment before beginning the installation.
- Utilize high-quality, well-maintained tools, as damaged or worn tools can lead to accidents or strips/crossthreads.

Torque Settings Matter:

- Make sure to torque all bolts and fasteners to the manufacturer's specs, as over-tightening or under-tightening can result in component failure or safety hazards.
- Use a calibrated torque wrench to achieve accurate torque settings.

Brake Line Precautions:

- Exercise extreme caution when working near brake lines to prevent damage or stress during installation or removal.
- Post-reinstallation, inspect brake lines for correct routing and secure attachment.

Alignment:

- Ensure proper alignment, critical for vehicle handling and tire wear, by scheduling a professional alignment after suspension component installation.

Handle Threads with Care:

- Treat threads delicately, particularly when dealing with nuts and bolts during installation and removal. Cross-threading or over-tightening can harm threads, compromise safety, and **dramatically** increase install time.

Double-Check Everything:

- Prior to concluding any installation step, verify alignment, torque settings, and the proper seating of components.
- Confirm that all components are correctly reassembled and no steps have been overlooked.

Seek Professional Assistance:

- If you encounter difficulties during the installation, do not hesitate to seek professional assistance.

Regular Maintenance and Inspections:

- After installation, routinely inspect suspension components for wear, loose fasteners, or damage.
- For on road driving, clean with soap and water every couple of months.
- Clean with soap and water after driving off road.
- Apply automotive wax to the bodies to aid in protection and longevity.

Contact Technical Support:

- For questions, concerns, or further assistance during the installation, please contact our customer support for technical assistance.

Radflo Suspension Technology

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FRONT SUSPENSION:

REQUIRED: 16mm OFFSET WHEEL SPACERS FOR AFTERMARKET, FACTORY ALLOY AND FACTORY STEEL WHEELS WITH STOCK TIRES

REQUIRED: 20mm OFFSET WHEEL SPACERS FOR AFTERMARKET AND FACTORY STEEL WHEELS WITH LARGER TIRES

***SOME NOT COMPATIBLE WITH FACTORY ALLOY WHEELS**

REAR SUSPENSION:

STRONGLY RECOMMENDED: REAR - DOUBLE SHEAR - UPPER MOUNTING BRACKET

Properly installing suspension components is crucial for vehicle safety and optimal performance. Follow these detailed instructions meticulously, adhere to torque specifications, and always prioritize safety during the installation process. For additional information or assistance, contact our customer support team.

Front Suspension Removal

- 1. Remove the Tire:**
 - **Tool: M21 Socket**
 - Loosen the lug nuts slightly before lifting the vehicle to make them easier to remove.
 - **Warning: Always prioritize safety and use jack stands when lifting a vehicle.**
- 2. Remove the ABS line from both sides of the vehicle**
 - Push the tab on the ABS line holder to release the clip, then pull up and remove it from the shock.
- 3. Keep a jack under the lower control arm while removing and installing shocks.**
- 4. Remove the Tie Rod Nut: Picture 1A**
 - **Tool: M18 Socket/Wrench**
- 5. Remove the Sway Bar Nut: Picture 1B**
 - **Tool: M18 Socket/Wrench**
- 6. Remove the Nuts from the Lower Mounting Bolts: Picture 1C**
 - **Tool: M21 Socket/Wrench**
 - Remove the nuts but leave the bolts in place for now to hold the shock.
- 7. Remove Driver Side Upper Mounting Bolts: Picture 1D**
 - **Tool: M13 Socket/Wrench, #25 Torx bit**
 - Remove the screws from the floor trim using a #25 Torx bit. Set the trim piece aside.
 - Some models may have three screws.
 - Pull the floor mat back and using a 13mm socket, remove the upper mounting bolts for the right side.
- 8. Remove Passenger Side Upper Mounting Bolts: Picture 1E**
 - **Tool: M13 Socket/Wrench**
 - Turn two fasteners 90 degrees using a flat screwdriver to remove the floor mat/tool tray cover piece under the dash. Set it aside.
 - Pull the floor mat up and remove upper mounting bolts using a 13mm socket.
 - Save hardware and steel plate to reuse during Radflo coil-over installation.
- 9. Lower the Jack, remove lower mounting bolts, and remove the shock.**

Front Suspension Installation

*****PLEASE SEE NOTE ON FITMENT IN (WARNINGS AND ADVICE)**

1. Prepare shocks for installation: Picture 2A

- Install Radflo Suspension Technology Coilovers using the factory upper mount from the original shocks.
- Inspect and replace upper mounts if necessary, using Mercedes-Benz genuine OEM parts.
- Remove the upper mount from the factory shock by holding the shaft with a 7mm hex key and removing the nut with a 24mm wrench/socket.

2. Assemble coilovers using the OEM Top Bushing: Picture 2B

- Place the spring and coil cone on the shaft
- Place the upper washer on top of the coil cone
- Hold the shaft using a 7mm wrench and tighten the nut using a 24mm wrench/socket.

3. Radflo Strut Angle Correction Plate

- Install the Radflo Angle Correction Plate

4. Install shocks: Picture 2C

- Shocks are side-specific; ensure correct installation on each side. Place the shock on the knuckle with the reservoir facing towards the rear of the vehicle.

5. Tighten Lower Mount Bolts : Picture 2D

- **Tool:** M21 Socket/Wrench
- Push the top of the knuckle inward so that the bottom bolt in the slotted hole is to the outside of the slotted hole (towards the tire).
- Tighten the lower bolt first, then tighten the upper bolt. Torque both bolts to factory specs.
- **Re-alignment is necessary after installation. Do not drive for extended periods without professional alignment.**

6. Jack the lower control arm up while maneuvering the upper mount into position

7. Reuse the factory upper mount plate inside the cab and the supplied bolts to attach the upper mount: Picture 2E

- **Tool:** M13 Socket/Wrench
- Install bolts and tighten to factory specs.
- Ensure Radflo Angle Correction Plate is correctly installed and aligned.
- After tightening upper mounts, replace the tool tray, floor mats, and trim pieces

8. Install Tie Rod and Nut: Picture 2F

9. Attach the Sway Bar Link and Install Nut: Picture 2G

10. Attach ABS line to the Left Shock:

- Slide ABS line between the hose and housing on the backside of the shock..

11. Attach ABS line to the Right Shock:

- Disconnect the brake wear sensor going to the brake and reroute the line between the shock and the reservoir hose.
- Slide ABS line between the hose and housing on the backside of the shock..

12. Reinstall the Tire:

- **Tool:** M21 Socket
- Tighten lug nuts partially while on lift/jack and fully when vehicle is on the ground.
- **Double-check:** Torque the lug nuts to manufacturer specifications and recheck after 50-100 miles of driving.

Rear Suspension Removal:

- 1. Remove Top Shock Bolt: Picture 3A**
 - **Tools:** M21 Wrench/Socket
 - **Double-check:** Make sure to keep this hardware.
- 2. Remove Lower Shock Bolt and Nut: Picture 3B**
 - **Tools:** M18 Wrench/Socket
 - **Double-check:** Make sure to keep this hardware.
- 3. Remove the Stock Shock:**

Rear Suspension Installation:

*****PLEASE SEE NOTE ON FITMENT IN (WARNINGS AND ADVICE)**

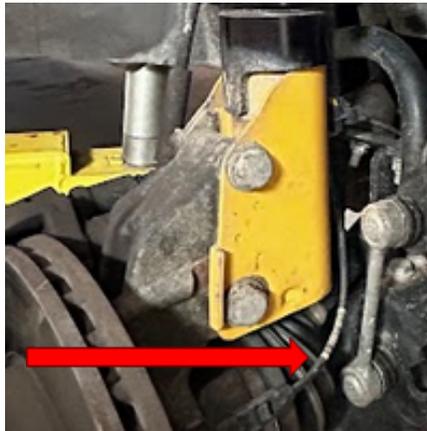
- 1. Install Radflo Piggyback: Picture 4A**
 - **Double-check:** Confirm correct mounting hardware orientation.
 - Long offset bearing spacer towards the frame, Reservoir towards the front of the vehicle.
- 2. Install Top Shock Bolt: Picture 4B**
 - **Tools:** M21 Wrench/Socket
 - **Double-check:** Torque to manufacturer specifications.
 - **FAILURE TO PROPERLY SECURE AND TORQUE THE TOP BOLT CAN LEAD TO CATASTROPHIC DAMAGE TO THE DAMPER AND VEHICLE**
- 3. Install Lower Shock Bolt and Nut: Picture 4C**
 - **Tools:** M18 Wrench/Socket
 - **Double-check:** Torque to manufacturer specifications.
- 4. Reinstall the Tire:**
 - **Tool:** M21 Socket
 - Tighten lug nuts in a star pattern for even pressure.
 - **Double-check:** Torque the lug nuts to manufacturer specifications and recheck after driving.

Appendix:

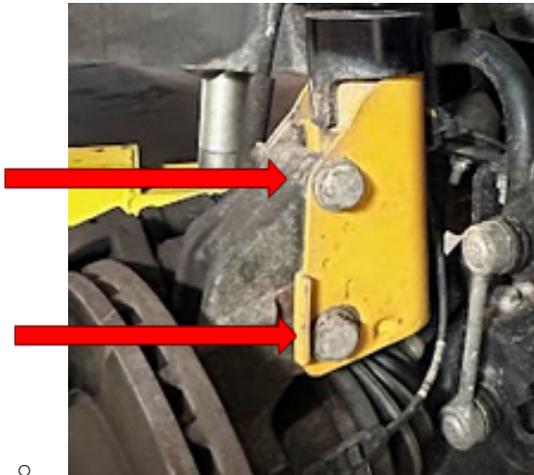
- Pictures referenced in the instructions:
 - Picture 1A



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- Picture 1B



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- Picture 1C

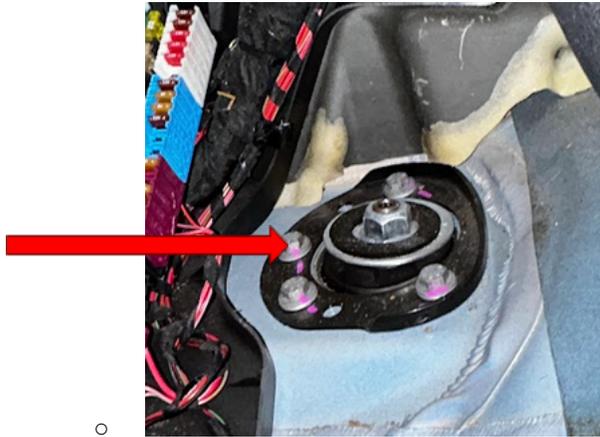


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- Picture 1D



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- Picture 1E



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○ Picture 2A



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○ Picture 2B



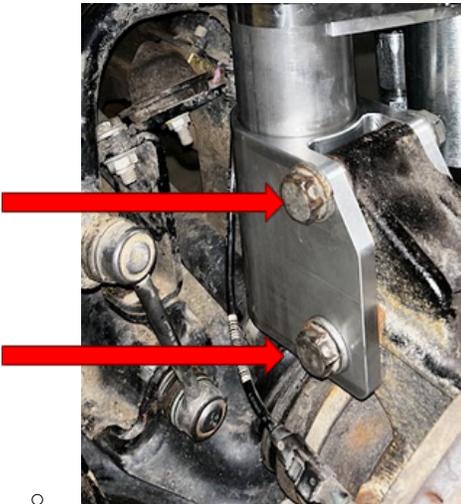
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○ Picture 2C - Front of Vehicle



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○ Picture 2D

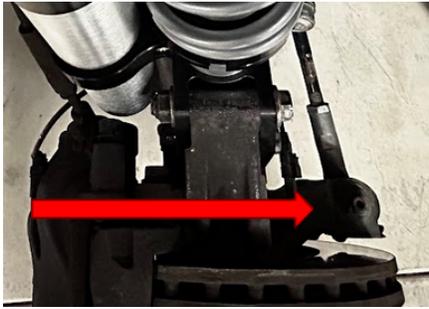


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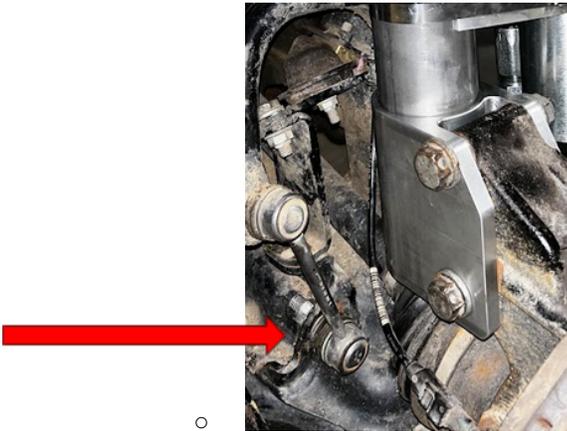
- Picture 2E



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- Picture 2F



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- Picture 2G



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Picture 3A



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- Picture 3B



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- Picture 4A (Hose Fitting towards front of vehicle)



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- Picture 4B



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- Picture 4C



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